Success Story

SUCCESS STORY, May 2006

High Efficiency Oil Filter Demonstration in the State Fleet

Used motor oil makes up the largest volume of hazardous waste generated in California. In 2003, California motorists generated over 92 million gallons of waste oil.

The Department of Toxic Substances Control (DTSC) is demonstrating the performance of High Efficiency Oil Filters in the State fleet. These filters clean engine oil better than standard filters, which extends the mileage between oil changes. By extending oil drain intervals, oil service costs and waste oil generation are reduced. Participation in the demonstration, gives State agencies an opportunity to take advantage of the benefits of pollution prevention as they lead by example in a "green government" project.

The study includes more than 100 State vehicles, including vehicles from the Departments of Transportation, Forestry, Corrections, and General Services, as well as Fresno and Long Beach School Districts. Participants install the filters, collect oil samples, and record vehicle mileages and service events.

The State of California operates a fleet of over 70,000 vehicles, and purchased approximately 225,000 gallons of motor oil in 2003. Doubling the oil change interval in these fleets would achieve an estimated annual cost savings of $500,000 and a decrease in waste oil generation of 125,000 gallons.

For large buses, preliminary data indicates that by using high efficiency filters, the oil change interval can be safely extended from 6,800 miles to 45,000 miles, an increase of more than 600 percent.

The project began with a survey of over 2,000 State, local government, and private fleet managers that identified barriers to using high efficiency filters. The survey and focus group meetings showed that performance and cost issues ranked as highest concerns. Because the length of time to recover investment is so important to fleet managers, DTSC designed the project to measure cost savings and benefits achieved during one year of use. Results are expected to be available July 2007.

A follow-up survey of participating fleet managers will serve as an indicator of the success of the demonstration project. The final report showing measurable cost savings and waste reduction will be used in DTSC's ongoing outreach to federal, State, local government, and private fleets. DTSC's upcoming Marine Vessel Service and Repair project stakeholders expressed interest in the technology for application in the marine industry.

Details of the study are available on the Department's Web site at: http://www.dtsc.ca.gov/TechnologyDevelopment/OPPTD_FLY_High-Efficiency-Oil-Filters.cfm

State of California
Department of Toxic Substances Control